

# **VERSION 2.1 – INTRODUCTION**

Thanks for downloading **Ease and Wizz**, a set of expressions for After Effects that give you more ways to interpolate between values. The obvious use is in motion, but they can be used on animated properties of any kind. They're applied with an After Effects-ish palette that can be docked, so it's very easy to use.

A while back, Flash guru Robert Penner created a suite of extremely useful easing equations that have been used to build thousands of websites worldwide. I've adapted these equations to work as expressions in After Effects (for an introduction to After Effects expressions, check out Dan Ebberts' excellent site).

One advantage of using an expression for easing is that the keyframes are editable. You can drag objects in the comp viewer, or move keyframes in the timeline, and the easing will be updated immediately.

# **VIDEO OVERVIEW**

Check out this video for a quick introduction.

# **INSTALLATION**

1. Navigate to the After Effects Scripts folder. On my Mac it's here (this path should be the same for different versions of AE, just the version number will change):

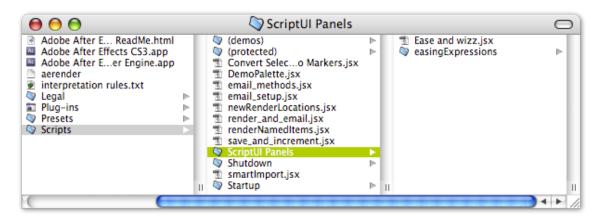
/Applications/Adobe After Effects CC 2015/Scripts

On Windows:

C:\Program Files\Adobe\Adobe After Effects CC 2015\Support Files\Scripts\

Create a folder in Scripts called "ScriptUI Panels" (if there isn't one already).

2. Extract the zip archive into the ScriptUI Panels folder. It should look something like this:



- 3. Relaunch After Effects. There should be a new item under the Windows menu: "Ease and Wizz. jsx". When you select this item, a new panel should appear. You can dock it with some other panels, wherever's convenient.
- 4. Create a new comp and put something in there (shape layer, bitmap, solid etc.). Animate one of its properties, such as position or scale. With at least one keyframe selected, select the "Apply" button on the Ease and Wizz palette.
- 5. Have fun! For more info and contact details, go to http://ianternet.net/ease-and-wizz/.

## **HISTORY**

## 2015.08.25 - Version 2.1

**[NEW]** Ease and Wizz now remembers what options were selected if you close the palette.

**[NEW]** A warning is displayed if you click "Apply" with no keyframes selected.

**[NEW]** Ease and Wizz displays a message on the info palette describing what it did (e.g. 'Applied

"Bounce" to 4 properties').

[CHANGED] When activating the Curvaceous feature the script removed menu items that were

incompatible. Now they are disabled, rather than removed.

[CHANGED] "Bounce" now appears before "Back" in the menu, which looks aesthetically more

pleasing when the Curvaceous checkbox is active.

### 2015.07.16 - Version 2.0.8

[REVERTED] Unfortunately 2.0.7 introduced an error in the inOutExpo behaviour, which could cause a

jump halfway through easing. It has been reverted to the previous behaviour.

#### 2015.07.08 - Version 2.0.7

[FIXED] Similar to the fix in version 2.0.6, inExpo and inOutExpo exhibit a small jump at the start

when easing between very large values. A magic number has been added to fix it.

[FIXED] Some of the Curvaceous expressions were missing default variables, which would cause

the expression to throw an error. These have been fixed.

### 2015.03.25 - Version 2.0.6

[FIXED] Due to a rounding error, outExpo and inOutExpo would display a small "jump" at the end

when using very large values. This has been fixed.

## 2015.01.05 - Version 2.0.5

**[FIXED]** Changed variable scoping to avoid namespace clashes.

**[NEW]** Added help button with info and version number.

[CHANGED] Small interface tweaks.

[CHANGED] Link in the comments to Pulp's live performance of "Sorted for E's and Wizz" at

Glastonbury, for the curious.

### 2013.07.12 - Version 2.0.4

**[FIXED]** Reinstated the graceful catch for errors when applying expression to mask path without

Curvaceous turned on.

**[FIXED]** Put global variables on a custom object and renamed functions to avoid namespace

clashes.

[FIXED] Caught a bug that left the easing-type popup blank if selecting Curvaceous when Elastic

or Back were selected. Now it defaults to Expo.

[CHANGED] Removed the requirement in the documentation to "Allow scripts to write files and access

network".

[CHANGED] The default period when using Elastic easing is now 0.81, rather than 0.8 (which may have

been related to a rare rounding error).

## 2012.10.10 - Version 2.0.3

**[FIXED]** Reverted the type in the popup menus to a black colour, as it was illegible in CS5.

### 2012.10.10 - Version 2.0.2

[FIXED] The inBounce behaviour was, inexplicably, identical to the outBounce behaviour. It now

behaves as advertised.

[CHANGED] The type in the popup menus is now white, making it more legible on the default

background.

[NEW] The popup menus and the "Curvaceous" checkbox now have tooltips for extra

information.

### 2010.10.21 - Version 2.0.1

**[CHANGED]** Changed function names that were clashing with Expression Toolbox.

[FIXED] Added a more graceful catch if you try to add an expression to a mask path without the

"Curvaceous" checkbox enabled.

### 2009.02.11 - Version 2.0

**[NEW]** Curvaceous. Allows you to apply easing expressions to curved motion paths, and to mask

or shape layer paths.

### 2008.12.01 - Version 1.12

**[FIXED]** After Effects CS4 compatibility.

## 2008.03.24 - Version 1.1

**[NEW]** Tooltips added to the palette

**[NEW]** Popup menu added so you can select which keyframes to affect (all, first two and last two,

or just the first two)

[CHANGED] Replaced the "type" radio buttons with a popup menu

[CHANGED] Eliminated need to choose easing Expressions folder path (thanks to Jeff Almasol)

**[FIXED]** Fixed colour of text in popup menus – thanks to Jeff again

## 2008.03.21 - Version 1.0

[NEW] Initial release

# **LEGALESE**

Below is the original BSD License for Robert Penner's easing equations, followed by an identical license for the Ease and Wizz code that I've wrapped around them.

TERMS OF USE - EASING EQUATIONS

Open source under the BSD License

Copyright © 2001 Robert Penner All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of the author nor the names of contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

TERMS OF USE – EASE AND WIZZ

Open source under the BSD License.

Copyright © 2015 Ian Haigh All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.

Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.

Neither the name of the author nor the names of contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.